

IN THE SPECIFICATION

Please amend the paragraph beginning at page 1, line 27:

Accordingly, a structure has been proposed in Japanese Patent Publication Laid-Open No. Hei. 09-042303 paragraph [0015] and [0016], and FIG. 2 ~~(refer to Patent Document 1)~~ for reducing this stress concentration of the small diameter portion 103 between the cut back portion 104b and the large diameter portion 101.

Please delete the paragraph beginning at page 1, line 33.

Please amend the paragraph beginning at page 6, line 3:

As shown in FIG. 2, the end portion of the groove portion 14a near to the large diameter portion 11 is formed as a curved portion, namely, a cut back portion 14b, that extends continuously with a second curved portion 13b at a position where the splines and grooves of the splined portion diametrically converge. Accordingly, there is a diameter difference d1 between the diameter of a portion of the groove portion 14a of the splined portion 14, excluding the cut back portion 14b, and the minimum diameter of the end portion of the second curved portion 13b near to the splined portion 14.

Please amend the paragraph beginning at page 6, line 9:

Furthermore, a first curved portion 13a as a curved portion; a flat portion 15 that is a straight portion that has a diameter that is constant with respect to the shaft axis; and the second curved portion 13b as a curved portion, are provided in this order from the tapered portion 12 side, so as to extend continuously and be interposed in a further portion in the space between the small diameter end portion of the tapered portion 12 and the cut back

portion 14b. In other words, two curved portions and one straight portion are provided between the cut back portion 14b and the tapered portion 12.

Please amend the paragraph beginning at page 7, line 14:

In FIG. 2, the externality of the conventional shaft, which is configured by splined portion 104 and small diameter portion 103, is indicated by two-dotted chain line. Further, text H indicates the size of the small diameter portion 103 of the conventional shaft. As can be seen from FIG. 2, there is a diameter difference d_0 between the diameter of the conventional groove portion of the splined portion and the diameter H of the ~~tip portion of the~~ small diameter portion of the conventional shaft on the splined portion side.

Please amend the paragraph beginning at page 9, line 9:

In the second embodiment, as shown in FIG. 3, the configuration of the shank ~~[[10]]~~ 10' between the cut back portion 14b of the splined portion 14 and the small diameter end portion of the tapered portion 12 is different to that of the previous embodiments. Namely, a first curved portion 23a and a second curved portion 23b having a radius of curvature that is larger than that of the first curved portion 23a are interposed and extend continuously in this order between the cut back portion 14b and the tapered portion 12, from the tapered portion 12 side. Namely, two curved portions are provided between the cut back portion 14b and the tapered portion 12.

Please amend the paragraph beginning at page 9, line 17:

End portions of the first and second curved portions 23a and 23b at the large diameter portion 11 side are formed so as to have respective radiuses with respect to (distance from) the shaft axis of the shank ~~[[10]]~~ 10' that are larger than that of the cut back portion 14b.

Please amend the paragraph beginning at page 10, line 13:

In the third embodiment, as shown in FIG. 4, the configuration of the shank ~~[[10]] 10~~ between the cut back portion 14b of the splined portion 14 and the small diameter end portion of the tapered portion 12 is different to that of the previous embodiments. Namely, a first curved portion 33a; a second curved portion 33b having a radius of curvature that is different to that of the first curved portion 33a; and a flat portion 35 which is a straight portion having a radius that is constant with respect to the shaft axis, are interposed and extend continuously in this order between the cut back portion 14b and the tapered portion 12, from the tapered portion 12 side. Namely, two curved portions and one straight portion are provided between the cut back portion 14b and the tapered portion 12.

Please amend the paragraph beginning at page 10, line 23:

Respective end portions of the first and second curved portions 33a and 33b at the large diameter portion 11 side are formed so as to have larger radiuses with respect to (distance from) the shaft axis of the shank ~~[[10]] 10~~ than the cut back portion 14b.

Please amend the paragraph beginning at page 10, line 30:

In FIG. 4, the externality of the conventional shaft, which is configured by splined portion 104 and small diameter portion 103, is indicated by two-dotted chain line. Further, text H indicates the size of the small diameter portion 103 of the conventional shaft. As can be seen from FIG. 4, there is a diameter difference d0 between the diameter of the conventional groove portion of the splined portion and the diameter H of the small diameter portion of the conventional shaft on the splined portion side.

Please amend the paragraph beginning at page 11, line 14:

With the fourth embodiment, as shown in FIG. 5, the configuration of the shank 10 between the cut back portion 14b of the splined portion 14 and the small diameter end portion of the tapered portion 12 is different to that of the previous embodiments. Namely, a first curved portion 43a, a first flat portion 45a which is a straight portion that is a constant distance from the shaft axis; a second curved portion 43b; and a second flat portion 45b which is a straight portion that is a constant distance from the shaft axis, are interposed and extend continuously in this order between the cut back portion 14b and the tapered portion 12, form the tapered portion 12 side. Namely, two curved portions and two straight portions are provided between the cut back portion 14b and the tapered portion 12.

Please amend the paragraph beginning at page 11, line 24:

Respective end portions of the first and second curved portions 43a and 43b at the large diameter portion 11 side are formed so as to have larger diameters with respect to (distance from) the shaft axis of the shank 10 than the cut back portion 14b.

Please amend the paragraph beginning at page 14, line 6:

An end portion of the curved portion 53 at the large diameter portion 11 side is formed so as to have a larger diameter with respect to (distance from) the shaft axis of the shank 10 than the cut back portion 14b.